Application No.: 10/606,343

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This listing of claims will replace all prior versions, and listings, of claims in the application. **Listing of Claims:**

1-30. (cancelled)

31. (currently amended) A method <u>implemented at least in part by a computer,</u> the method in combination with first, second, and third tables of data, the first table organizing a first type according to a first attribute and a second attribute, the second table organizing a second type according to a third attribute, the third table organizing a third type according to the first attribute and the third attribute, the method comprising:

modeling a measure according to the second type of the second table; modeling a first dimension according to the third attribute of the second table; modeling a second dimension according to the second attribute of the first table;

tying the measure to the first dimension according to the third attribute of the second table to allow the measure to access data for the first dimension according to the third attribute; and

tying the measure to the second dimension by, for each entry of the first dimension, allocating a value of the measure for the entry of the first dimension by:

identifying each row in the third table within which a value of the third attribute matches a value of the entry of the first dimension;

identifying a value of the first attribute within each identified row in the third table, and, for each identified value of the first attribute:

identifying each row in the first table that includes the value of the first attribute, the first table including no data for the measure;

identifying a value of the second attribute within each identified row in the first table; and

identifying each entry in the second dimension for which a value of the entry of the second dimension matches an identified value of the second attribute; and

allocating at least a portion of the value of the measure for the entry of the first dimension to at least one of each identified entry of the second dimension; and

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generating and displaying a data cube that comprises the measure and the first and second dimensions, the data cube being used for analytically modeling data from at least the first and second tables.

32. (previously presented) The method of claim 31, comprising modeling the measure according to the second type of the second table, the second table comprising data stored in a relational database.

33. (previously presented) The method of claim 31, comprising allocating a complete portion of the value of the measure for the entry of the first dimension to every identified entry of the second dimension.

- 34. (previously presented) The method of claim 31, comprising allocating less than a complete portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension.
- 35. (previously presented) The method of claim 34, comprising allocating an even portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension.
- 36. (previously presented) The method of claim 34, comprising allocating a proportional portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension.
- 37. (previously presented) The method of claim 31, comprising allocating a total value of the measure for the entry of the first dimension to a pre-determined principal identified entry of the second dimension.
- 38. (currently amended) A computer readable medium having stored thereon computer readable instructions in combination with first, second, and third tables of data, the first table organizing a first type according to a first attribute and a second attribute, the Page 3 of 13

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second table organizing a second type according to a third attribute, the third table organizing a third type according to the first attribute and the third attribute, computer readable instructions, when executed by a processor, cause the processor to perform for performing the following steps:

modeling a measure according to the second type of the second table; modeling a first dimension according to the third attribute of the second table; modeling a second dimension according to the second attribute of the first table;

tying the measure to the first dimension according to the third attribute of the second table to allow the measure to access data for the first dimension according to the third attribute; and

tying the measure to the second dimension by, for each entry of the first dimension, allocating a value of the measure for the entry of the first dimension by:

identifying each row in the third table within which a value of the third attribute matches a value of the entry of the first dimension;

identifying a value of the first attribute within each identified row in the third table, and, for each identified value of the first attribute:

identifying each row in the first table that includes the value of the first attribute, the first table including no data for the measure;

identifying a value of the second attribute within each identified row in the first table; and

identifying each entry in the second dimension for which a value of the entry of the second dimension matches an identified value of the second attribute; and

allocating at least a portion of the value of the measure for the entry of the first dimension to at least one of each identified entry of the second dimension; and

generating and displaying a data cube that comprises the measure and the first and second dimensions, the data cube being used for analytically modeling data from at least the first and second tables.

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39. (currently amended) The computer readable medium of claim 38, comprising instructions for performing wherein the instructions cause the processor to perform the step of modeling the measure according to the second type of the second table, the second table comprising data stored in a relational database.

- 40. (currently amended) The computer readable medium of claim 38, comprising instructions for performing wherein the instructions cause the processor to perform the step of allocating a complete portion of the value of the measure for the entry of the first dimension to every identified entry of the second dimension.
- 41. (currently amended) The computer readable medium of claim 38, comprising instructions for performing wherein the instructions cause the processor to perform the step of allocating less than a complete portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension.
- 42. (currently amended) The computer readable medium of claim 41, comprising instructions for performing wherein the instructions cause the processor to perform the step of allocating an even portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension.
- 43. (currently amended) The computer readable medium of claim 41, comprising instructions for performing wherein the instructions cause the processor to perform the step of allocating a proportional portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension.
- 44. (currently amended) The computer readable medium of claim 38, comprising instructions for performing wherein the instructions cause the processor to perform the step of allocating a total value of the measure for the entry of the first dimension to a predetermined principal identified entry of the second dimension.

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45. (currently amended) A system in combination with first, second, and third tables of data, the first table organizing a first type according to a first attribute and a second attribute, the second table organizing a second type according to a third attribute, the third table organizing a third type according to the first attribute and the third attribute, the system comprising:

a processor operative to execute computer executable instructions; and memory having stored therein computer executable instructions for performing the following steps:

modeling a measure according to the second type of the second table; modeling a first dimension according to the third attribute of the second table;

modeling a second dimension according to the second attribute of the first table;

tying the measure to the first dimension according to the third attribute of the second table to allow the measure to access data for the first dimension according to the third attribute; and

tying the measure to the second dimension by, for each entry of the first dimension, allocating a value of the measure for the entry of the first dimension by:

identifying each row in the third table within which a value of the third attribute matches a value of the entry of the first dimension;

identifying a value of the first attribute within each identified row in the third table, and, for each identified value of the first attribute:

identifying each row in the first table that includes the value of the first attribute, the first table including no data for the measure;

identifying a value of the second attribute within each identified row in the first table; and

identifying each entry in the second dimension for which a value of the entry of the second dimension matches an identified value of the second attribute; and

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allocating at least a portion of the value of the measure for the entry of the first dimension to at least one of each identified entry of the second dimension; and

generating and displaying a data cube that comprises the measure and the first and second dimensions, the data cube being used for analytically modeling data from at least the first and second tables.

- 46. (previously presented) The system of claim 45, comprising computer executable instructions for performing the step of modeling the measure according to the second type of the second table, the second table comprising data stored in a relational database.
- 47. (previously presented) The system of claim 45, comprising computer executable instructions for performing the step of allocating a complete portion of the value of the measure for the entry of the first dimension to every identified entry of the second dimension.
- 48. (previously presented) The system of claim 45, comprising computer executable instructions for performing the step of allocating less than a complete portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension.
- 49. (previously presented) The system of claim 48, comprising computer executable instructions for performing the step of allocating an even portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension.
- 50. (previously presented) The system of claim 48, comprising computer executable instructions for performing the step of allocating a proportional portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension.

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51. (previously presented) The system of claim 45, comprising computer executable instructions for performing the step of allocating a total value of the measure for the entry of the first dimension to a pre-determined principal identified entry of the second dimension.